

* Output Design :

- Starting point of designer process is proper knowledge of system requirement which normally be converted in terms of output.
- In any system, output is largely depending on Input.
- No system can be design properly without knowing what output is exactly required. It means that organization's output need should be consider first.
- Before devising appropriate method & procedure, database, plan, Input & effective Internal control.

- While designing output, System Analyst must accomplished following

- 1) determine what information is to be present?
- 2) Decide whether to display to print or speak information and select output medium.
- 3) Arrange presentation of Information in acceptable format.
- 4) Decide how to distribute output to intended recipient

* Objective of Output Design:

- The output from Information System should accomplished one or more following objectives:

- 1) Convey the information about past activity, current status & future projections.
- 2) Signal important events, opportunity or exception.
- 3) Trigger of Alarm
- 4) Conform the actions

* Types of Output:

- Main types of output is as follow:

- 1) External output
- 2) Internal Output
- 3) Ternaround output
- 4) Operational output
- 5) Interactive output

1) External Output:

- It intended to go outside users organizations

- eg. Payslip, ^{tax} ~~tax~~ return

2) Internal Output:

- It is used within users organization and it require careful design, because they are users interface with computer.

- eg. pay structure, Attendance, etc.

3) Ternaround output:

- The data will be added to this document before they are ~~satux~~ written to the computer for further processing.

- eg. credit card billing.

4) Operational Output:

- The use of operational output is within computer department.
- eg. Timetable, program listing

5) Interactive output:

- It involve user communicating directly with computer.
- eg. dialogbox.

* Output Media:

- The System analyst has to determine most appropriate medium for output.
- The most common medium are as follow.
 - 1) printed output
 - 2) Visual output
 - 3) Turnaround document output
 - 4) Secondary storage output
 - 5) Microfilm & Microfiche output.
 - 6) Audio response output.

1) Printed Output:

- line printer, dotmatrix printer, laser printer, & plotter are commonly used device for printed output.

2) Visual Output:

- CRT unit is widely use in the form of visual output.
- With CRT unit, Hardcopy is not required.
- eg. order entry system, Account payable or receivable system, Airline & train Reservation System. [Visual output is more suitable]

3) Turnaround Document Output:

- In order to reduce input work at lower **RATE** turnaround. document in a form of punch card are widely use.
- eg. credit card billing & employee time card.
- Additionally OCR form can be prepaid as a output which serve as input to the computer system at later date.

4) Secondary Storage Output:

- It generally include magnetic disk, magnetic drum and magnetic tap.

5) Microfiche output:

- Microfiche are photographically reduce document on **FILM**
- The output is **WRITTEN** on microfilm which is **FED INTO** micro form recorder.
- This technique is widely use in library.

6) Audio response output:

- It is capable of providing online inquiry into system. when output is restricted to sort messages.
- eg. banking system provide balance of customer.

* Design Principle of Output :

- A system design should try to incorporate following design principle for output.

- 1) Principle of starting with output.
- 2) Principle of acceptability of report.
- 3) Principle of timely output.
- 4) Principle of enhancing decision making process.
- 5) Principle of practising "management by exceptions".
- 6) Principle of duplication, reduction in report.
- 7) Principle of simplicity of report.

1) Principle of starting with output :

- No system can be design properly without knowing what output is exactly required.
- It means that organization output need should be consider first before design devising appropriate method, ~~prod~~ procedure, database, plan & effective internal control.

2) Principle of acceptability of Report :

- End user has to accept this output since they are people who will be using it for there desired output.

3) Principle of timely output:

- An ~~any~~ output in time can help to make better decision.

4) Principle of enhancing decision Making Process:

- After all system are design for manager and director to make better decision.
- Naturally output report must be prepared. Keeping this principle constantly in mind.

5) Principle of Practising "Management by Exception"

- Management control through completed task, the report should be design not only for what has happen but also for what deviation where there from there actual plan.

6) Principle of duplication reduction in report:

- Duplicate or unnecessary information report should be minimize to extend possible.
- It automatically reduce processing cost.

7) Principle of Simplicity of Report:

- Report should be consider as simple and self ~~explan~~ explanatory.